

# The effect of government expenditures on Indonesia economic growth

Nurlina<sup>1</sup>

<sup>1</sup> *University of Samudra Langsa, Meurandeh Street, Langsa Lama, Aceh Timur, 24418, Nanggroe Aceh Darussalam, Indonesia*

## ARTICLE INFO

### Article history:

Received 17 February 2015

Revised 30 March 2015

Accepted 9 April 2015

### JEL Classification:

H5, H50

### Key words:

Government Expenditures,  
Economic Growth,  
Indonesia.

### DOI:

10.14414/jebav.v18i1.377

## ABSTRACT

*The debate on the effect of government expenditure on economic growth has still happened in relation to classical group's and Keynesian's view. The aim of this study confirms the relationship, with the application of the case in Indonesia. Government expenditures are aggregated, while economic growth is measured by gross domestic product. With time series design, the secondary data used covers the period of 2004 to 2013. At first, the data were analyzed descriptive-graphics, while the hypothesis testing using t-test. The results obtained indicate that government spending has a positive and significant influence to economic growth. Thus, spending and investment forms by government as a form of fiscal policy must be done with great caution in order to avoid misallocation or inequality in the distribution of inter-sector development, given the importance of its role as a pending national economic growth.*

## ABSTRAK

*Pengaruh dari pengeluaran pemerintah terhadap pertumbuhan ekonomi negara merupakan bahan perdebatan panjang antara pandangan kelompok klasik dan Keynesian. Penelitian ini bertujuan mengkonfirmasi hubungan tersebut, dengan penerapan kasus di Indonesia. Pengeluaran pemerintah bersifat agregat, sementara pertumbuhan ekonomi diukur dengan produk domestik bruto. Dengan desain runtut waktu, data sekunder yang digunakan mencakup periode dari tahun 2004 sampai 2013. Mula-mula data dianalisis secara deskriptif-grafis, sementara pengujian hipotesis menggunakan uji-t. Hasil-hasil yang diperoleh menunjukkan bahwa pengeluaran yang dilakukan pemerintah memiliki pengaruh yang positif dan signifikan terhadap pertumbuhan ekonomi. Dengan demikian, bentuk-bentuk pengeluaran maupun investasi oleh pemerintah sebagai bentuk kebijakan fiskal harus dilakukan dengan penuh kehati-hatian agar tidak terjadi misalokasi atau ketidakmerataan pendistribusian antarsektor pembangunan, mengingat pentingnya peran yang dimilikinya sebagai pending pertumbuhan ekonomi nasional.*

## 1. INTRODUCTION

The success of the economic development in any country essentially depends on a series of activities that are taking place or continuing to create better condition both simultaneously and consistently. Within this framework, it can also spur the economic development for equitable development in order to improve the welfare of the people fairly and equitably. This argument is in line with the objectives of the Republic of Indonesia as stated in the preamble of the 1945 Constitution, in which, it promotes the general welfare, the intellectual life of

the nation, and participation in the establishment of world order. One measure of economic development is economic growth that is the real impact of the government's development policies which are implemented through a series of forms that policy.

In fact, government expenditure is one of the government's efforts to realize the hopes of creating prosperity for all the people. In accordance with the thought by Keynesian groups, government intervention through this spending will stimulate the level of aggregate demand, which in turn, will lead to economic growth. Yet, this is in contrast to the

\* Corresponding author, email address: <sup>1</sup> nurlinazm@gmail.com.

ideas of Adam Smith who argued that Laissez-Faire system in the government is considered to have no concern with the need to join or to intervene and let the free market system that encourages the creation of prosperity of a nation (Ogundipe & Oluwatobi 2013; Folster & Henrekson 2001).

Both of the above views are often debated by academics, while the evidence by the research has not reached to the whole conclusion. For example, the study by Gregorious and Ghosh (2007) found that countries with large government expenditure levels tend to experience higher economic growth. Loizides and Vamvoukas (2005), Alexiou (2009), as well as Alshahrani and Alsadiq (2014) also found evidence to support the argument that government spending can stimulate economic growth of the country concerned. The results of these studies support the idea Keynes that form of government intervention is needed to create economic growth in the country, the next one will improve the welfare of its people.

However, the empirical evidence by a number of other researchers provides another fact. For example, Al-Shatti (2014) found that public spending by the government failed to encourage economic growth in Jordan. Similarly, the results of a study by Folster and Henrekson (1999) in a number of countries also show evidence such as by Al-Yousif (2000) in Saudi Arabia, as well as Ogundipe and Oluwatobi (2013) in Nigeria. They found that total government expenditure seems to have a negative effect on economic growth. The argument emphasizes that it supports the failure by Keynesian view because sometimes the government spending and investment in projects are not productive or they produce public goods that could be produced more efficiently by the private sector. The fact dealing with irrational activity is considered to produce a misallocation of government spending and can inhibit the growth of national output.

A similar fact also occurs in Indonesia, where government spending and investment aimed at encouraging economic growth. For example, Table 1 shows that the amount of government expenditure for consumption and investment in the aggregate during 2004 to 2013 continues to rise each year, except for the year 2009. It can be seen when compared to government expenditure in 2004 with the amount of Rp. 430,041.20 billion to Rp. 1,683,011.10 billion in 2013, representing an increase of Rp. 1252969.9 billion or 74.45 percent. Some components of government expenditure which includes household spending, investment, government consumption and investment spending, and net ex-

ports, are all referred to as Aggregate Expenditure. The components of the aggregate expenditure are in the form of economic growth.

In this sense above, it appears that government spending has an effect on determining economic growth rates. This evidence is supported by the economic theory of the three sectors of the economy and open economy (Wu, 1995; Zhang 2009). In this case, economic growth is defined as growth in economic activity that leads to the goods and services produced in the community increases (Sukirno 2011). In such a situation, a series of policies held by the government is necessary because the firm economic growth can be achieved in each period. Expenditure which is a form of fiscal policy is owned by the government to influence economic activity (Maipita 2012).

Indonesia's economic growth over the past few years has recorded a positive growth. This is as in the report released by the Indonesian government through related ministries that is the Ministry of Economy. It is obvious that the positive economic growth and stable is the purpose of government policies. As based on the social accounting system data Indonesia in 2005 and 2008, the result of simulation by Maipita (2012) provides a generalization that government expenditure has a positive impact on macroeconomic performance. When using the data period 1993-2003, for example, Sodik (2007) found in the aggregate government expenditure significant effect on regional economic growth in Indonesia. Alfirman and Sutriyono (2006) also found that government expenditure during the period from 1970 to 2003 contributed to the growth of national economy.

However, Wahyu, Sukarsa and Yuliarmi (2014) cautioned that government spending may also contribute either directly or indirectly on the income gap in the area, which is due to the weakness of the distribution of expenditure and infestation allocation evenly across regions. This study uses the Indonesian economic growth measured by Gross Domestic Product (GDP). This can be seen in Table 2 showing that Indonesia's GDP growth has fluctuated throughout the years 2004 to 2013. When compared to the value of GDP, it was achieved in 2004 totaled to Rp. 1,506,296.60 to Rp. 2,636,976.00 in 2013, meaning an increase of Rp. 1130679.4 or 42.88 percent.

By looking at the development of economic growth that grows with the number of positive and it appears that the government expenditure also continues to rise. Thus, it is deemed interesting to see how government spending affects the growth of the national economy. This study also aims to con-

firm the effect of government spending on national economic growth which is an implementation of the Keynesian view.

## 2. THEORETICAL FRAMEWORK AND HYPOTHESES

### Classical Concept of Economic Growth

In view point of classical economists, such as Adam Smith, David Ricardo, and John Stuart Mill, there are four factors that affect economic growth such as population, capital goods stocks, extensive land and natural resources as well as the level of technology. In this point of view, the law of diminishing return with additional results will affect economic growth, which means that economic growth will not continue (Arpaia & Turrini 2008; Chude & Chude 2013). At the outset, when the population and natural resources are relatively little excessive, the rate of return on the capital investment tends to be high, and then the employer will get a big advantage. This will lead to new investment and economic growth to materialize. Such circumstances will not continue to take place. If the population is already too big, the addition will reduce the level of economic activity. This is due to the productivity of each population which has become negative. For more specific argument, economy will achieve a very low level of development (Sukirno 2011).

The next is the Neo-classical growth theory developed by Solow (1956) for improving the previous classical theories. It focuses on the discussion on the accumulated stock of capital goods and relevance to the satisfaction of the people to save or invest. The significant assumption of the Solow model is considered to be a constant level of technology (no technological progress). The rate of depreciation is considered constant, no foreign trade or capital flows in and out, no government sector, as well as the rate of population growth (labor) also considered being constant. To simplify the analysis, can be added to the assumption that the entire working population, so the number of people equal to the amount of labor (Sukirno 2011; Abdullah et al. 2009). In this theory, the economy is said to be in stable equilibrium when the same amount of savings with investment needs. Stable equilibrium state will change if what happen are the saving rate changes, changes in the growth rate of technology, and the acceleration of technological development (Rahardja & Manurung 2005).

### Government Role in Economic Growth

Some of the major problems in economy as always be faced by every country are economic growth,

**Table 1**  
**Government Expenditures Year 2010 – 2013**

Year	Government Expenditure (Rp. Billion)	Changes	
		Rp	%
2004	430.041,20	-	-
2005	509.632,40	79.591,2	18,51
2006	667.128,70	157.496,3	30,90
2007	757.649,90	90.521,2	13,57
2008	985.730,70	228.080,8	30,10
2009	937.382,10	(48.348,6)	(4,90)
2010	1.126.146,50	188.764,4	20,14
2011	1.202.046,20	75.899,7	6,74
2012	1.548.310,40	346.264,2	28,81
2013	1.683.011,10	134.700,7	8,70

Source: Budget 2004-2013 (Data processed researcher 2014).

**Table 2**  
**GDP at 2000 Constant Prices Year 2010-2013**

Year	GDP Value (Rp. Billion)	Change	
		Rp	%
2004	1.506.296,60	-	-
2005	1.605.261,80	98.965,2	6,57
2006	1.703.422,40	98.160,6	6,11
2007	1.821.757,70	118.335,3	6,95
2008	1.939.625,90	117.868,2	6,47
2009	2.036.685,50	97.059,6	5,00
2010	2.171.113,50	134.428,0	6,60
2011	2.322.653,10	151.539,6	6,98
2012	2.481.796,70	159.143,6	6,85
2013	2.636.976,00	155.179,3	6,25

Source: BPS 2004 - 2013 (data is processed researcher, 2014)

instability of economic activity, unemployment, price rises (inflation), and the balance of trade and balance of payments. Every economic policy aims to address these economic problems. The goals of macroeconomic policy can be divided into five aspects, namely: (1) to stabilize economic activity; (2) to reach the level of employment (employment) full without inflation; (3) to avoid the problem of inflation; (4) to create a firm economic growth; and, (5) to realize the substantiality of the balance of payments and foreign exchange rates (Putong 2010; Sariono et al. 2007).

In particular, Keynes argued that the economic activity rate is determined by aggregate expenditure. In general, aggregate expenditure in a particular period is less than the aggregate expenditure needed to reach the level of full employment. This situation is due to the investment made by the entrepreneur that is usually lower than the savings to be made in a full employment economy.

In such instance, Keynes argued the free market system will not be able to make adjustments that create full employment (Tcherneva 2008; Ogundipe & Oluwatobi 2013). To achieve the ne-

cessary conditions for government policies, it can be distinguished between fiscal policy, monetary and direct supervision. Fiscal policy is done through the setting of government expenditures and receipts. In times of inflation, it is usually in the form of fiscal policy that will reduce government spending and increase taxes. Conversely, if a serious unemployment, the government tries to increase the expenditure and reduce taxes. Thus, monetary policy is conducted by influencing the money supply and interest rates. Direct supervision is done by making the rules (Ogundipe & Oluwatobi 2013; Manik & Hidayat 2010; Putong 2010).

The theory of economic growth by Harrod-Domar explains the requirements that must be met for an economy can achieve growth or steady growth firm in the long run. Harrod-Domar analysis uses analogy-analogy, namely: (i) capital goods have reached full capacity; (ii) savings is proportional to the national income; (iii) the capital-output ratio (capital output ratio) fixed value; and, (iv) the economy consists of two sectors. This theory complements Keynes thought, where Keynes uses a short-term perspective, while the Harrod-Domar a long-term perspective. Harrod-Domar In the analysis indicated that although in any given year capital goods has reached full capacity, the aggregate expenditure in the year, namely  $AE = C + I$ , will lead to a capacity of capital goods becomes higher in the next year. In other words, the prevailing investment in the current year will increase the capacity of capital goods for the issuing of goods and services in the following year (Wahyu et al. 2014; Hussein and Thirlwall 2000).

The role of government must be executed including the role of the allocation, distribution role, and the role of stabilization (Mangkoesoebroto 2009; Suparmoko 2000). The role of allocation is implemented by the government in which the allocation of economic resources is carried out efficiently, especially in providing goods and services that the private sector cannot produce it. The role of the distribution of the fiscal policy implemented by the government through a state change society so that in accordance with the expected distribution of income through progressive taxation, i.e. the relative tax burden is greater for those who are able and redistribute to the poor. The role of stabilization is done through the government's efforts to make policies aimed at controlling excessive economic shocks.

The role of government in economy is required to provide legal system or regulations that cannot be provided by the private sector, as well as to cor-

rect the market failures that may in some form (Sukirno 2011: Stiglitz, 1989; Pasour, Jr., 1981). The first is not perfect competition, where the markets are imperfect and tend to monopoly, the price of which occurs usually higher and the amount of production less. The Government is expected to regulate and improve the welfare of the community that is not reduced. Both are related to public goods (public goods) which has the characteristics of non excludable and non-rivalry. With the nature of public goods, it can provide rise to the phenomenon of free riders, ie people will be competing for not paying in the use of the goods. This system is the provision of such goods which cannot be done by the private sector. It must be done by the government. The third is the result of a market economy externalities are selfish, so the thought is to minimize costs while indirect impacts such as social effects are not taken into account. Fourth is the failure of information, which in some cases people who really need the information cannot be provided by the private sector, such as the information about weather forecast. Agriculture and marine desperately need weather information, but the private sectors do not provide it. The government should provide the weather information.

An ideal economy is perfectly competitive where the allocation of resources is derived from voluntary exchange of goods and money at the market price. This would result in the maximum quantity of goods and services of all available resources in the economy. The fact is that the market is not always present in his form of ideal condition. Market economy is often entwined pollution and monopoly along with soaring inflation or unemployment and in practice also that the distribution of income in a *laissez-faire* society is very uneven. To overcome these weaknesses the government took an important role in the economy.

### **Government Expenditure**

Government expenditure reflects the government's fiscal policy (Loizides & Vamvoukas 2008; Jiranyakul & Brahmasrene 2007). If the government has set a policy to purchase goods and services, government expenditures reflect the costs to be incurred by the government to implement the policy. Government expenditure in real terms can be used as an indicator of the size of government activities are financed by the government spending. The larger and more government activities, the greater the government expenditure is concerned. The proportion of government expenditure to national income (GDP or GDP) is a measure of the activity of gov-

ernment in an economy (Arpaia & Turrini 2008; Loizides & Vamvoukas 2005).

Government expenditure is part of fiscal policy (Mangkoesoebroto 2009; Sitaniapessy 2013) which is a government action to regulate the course of the economy by determining the amount of revenue and government spending each year is reflected in the Budget documents for national and local to the area or region. The objective of fiscal policy is to stabilize prices, the level of output and employment and spur economic growth. Based on the identification of components of the state budget in mind, the government expenditure is allocated to several types of expenditure, namely the central government expenditure, transfers to local and suspension. Central government expenditures include personnel expenses, shopping goods, capital expenditures, interest payments, subsidies, grants expenditure, social assistance, and other expenditures. The transfer to the area includes the balance funds, as well as the special autonomy fund and adjustments.

The majority of government expenditure is to finance the administration of the government and government officials, finance education and health care systems, finance shopping for the armed forces, and finance various types of infrastructure are important in development are some of the important areas of government funded (Sukirno 2011). When related to government expenditure, some forms of government-run economic policies are fiscal policy, monetary policy, and the policy of the supply side (Putong 2010; Nawawi & Irawan 2010; Sukirno 2011; Maipita 2012).

Fiscal policy includes the steps of the government to make changes in taxation and government spending with a view to influencing aggregate spending in the economy. Through fiscal policy on aggregate expenditure will be increased and this step will increase the national revenues and level of employment. This tax reduction will increase the ability of people to buy goods and services and will increase the aggregate expenditure. Then, the aggregate expenditure can be further improved by increasing government spending on goods and services that are needed. In times of inflation or economic activities, they have reached the level of full employment and rising prices that has been growing rapidly. Otherwise, they have prevailed, the increased taxes and reduced government expenditure.

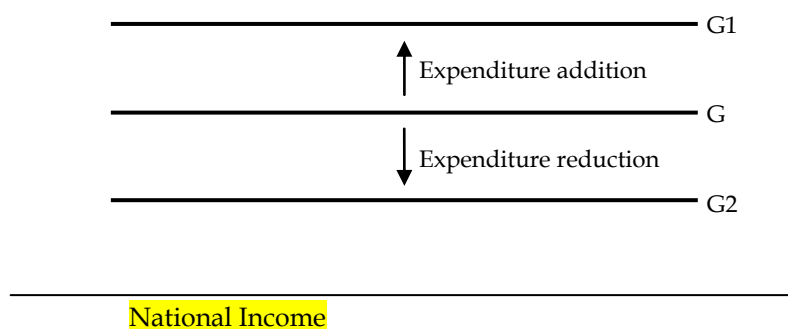
Monetary policy includes government measures implemented by the Central Bank (in Indonesian Central Bank is Bank Indonesia) to affect

(change) the money supply in the economy or a change in interest rates. They have intent to influence the aggregate expenditure. Supply side policies aimed at increasing the efficiency of the companies that can offer their goods at a cheaper price or with better quality. One of the supply side policies is a policy of income (income policy), i.e. government measures aimed at controlling the demands of increase in labor income. This objective is carried out to prevent excessive increase in revenue.

The development model of the development of government expenditure is developed by Rostow and Musgrave linking government spending growth to the stage of economic development (Chude & Chude 2013; Rahardja & Manurung 2008; Al-Shatti 2014). In the early stages of economic development, the percentage of total government investment is to a great investment because at this stage the government should provide the infrastructure. At the intermediate stage, the government investment is still needed to avoid market failure caused by private investment has been greater. At the economic level further, government activity switches in the form of expenditures for social activities.

Wagner's Law, next, states that in an economy, where per capita income increases, relative government spending will increase. According to Wagner, why it leads to the greater role of government is that it is due to the government that should regulate relations arising in society, law, education, recreation, culture and so on (Mangkoesoebroto 2009; Loizides & Vamvoukas 2005; Samudram et al. 2009). Wagner's legal weakness is because the law is that it not based on a theory regarding the selection of public goods. Wagner based his views with the organic theory of the government (organic theory of the state), which considers the government as an individual who is free to act, regardless of other community members. Wagner's Law can be formulated as the ratio of government expenditure per capita (PKPP) with income per capita (KDP), which is the value of GDP per population.

Peacock and Wiseman theory bases itself on a view that the government is always trying to increase expenditure, while people do not like to pay greater taxes to finance the government expenditure. According to this argument, the people have a tolerance level of taxation, namely the degree to which the public can understand the magnitude of the tax levy required by the government to finance government spending (Rowley & Tollison, 1994; Bagdigen & Cetintas 2003; Basri & Subri 2005).



**Figure 1**  
**The function of Government Expenditures on National Income**

Source: Sukirno 2011.

### **Building the Hypothesis: The Effect of Government expenditure on Indonesia Economic Growth**

The economic growth describes or measures the achievement of the development of an economy (Wahyu et al. 2014; Mangkoesebroto 2009). In a real economic activity, economic growth means the fiscal development of goods and services existing in a country such as increasing the production of industrial goods, infrastructure development, increasing the number of schools, the production of the service sectors, and production of capital goods (Al-Shatti 2014; Chude & Chude 2013). However, by using various types of production data, it is very difficult to give an overview of the economic growth that has been achieved. Therefore, to describe an idea of the economic growth achieved in a certain country, the size always used is the real national income growth rates.

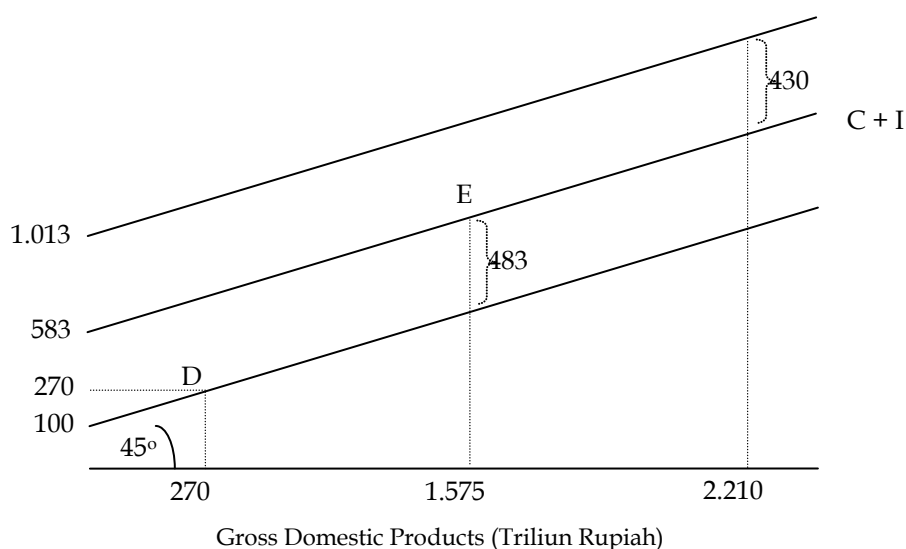
The government expenditure reflects government policy. If the government has set a policy to purchase goods and services, government expenditures reflect the costs to be incurred by the government to implement policies (Maipita 2012; Al-shahrani & Alsadiq 2014). Government expenditure in real terms can be used as an indicator of the size of government activities which are financed by the government expenditure. Thus, the larger and more government activities, the greater the government expenditure is concerned. The proportion of government expenditure to national income is a measure of the activity of government in an economy (Sitaniapessy 2013; Samudram et al. 2009).

Some determinants of government expenditure can be projected tax that is received; economic objectives to be achieved; and, political and security considerations (Manik & Hidayat 2010; Rahardja & Manurung 2008). The function of government expenditure to national income is also an indicator of economic growth, according Sukirno (2011) in which it can be expressed in Figure 1.

The government is as indicated by the function G. In the following period, for example, the unemployment is very bad, and then to overcome it, government does more expenditure as much as in G1. This step transfer function G upward. When the economy has experienced a problem of inflation, the government tries to reduce expenditures and changes indicated by the movement of the expenditure function of government from G to G2.

The concept of Gross Domestic Product (GDP) is a concept that is considered more appropriate measure for the economic growth compared with other concepts of national income (Ogundipe & Oluwatobi 2013; Arpaia & Turrini 2008). As such, GDP can be interpreted as the value of goods and services produced in the country in a given year. In addition to GDP, it is also known as the term Gross National Product (GNP) that is a concept that has meaning in conjunction with GDP but predicting the types of income are slightly different (Putong 2010; Loizides & Vamvoukas 2005). In the GNP, the value of goods and services were counted in the national income is just the goods and services produced by the factors of production are owned by nationals of countries that national income is calculated. By looking at the differences, it can be formulated nature of the relationship between the two, that GDP is the difference between GNP and PFN-LN. PFN-LN is net factor income from abroad; or income of the factors of production received from abroad minus income production factors are paid abroad (Sukirno 2011; Putong 2010).

Furthermore, the study related to the effect of the increase or decline in aggregate expenditure on the level of economic growth can be conducted through multiplier analysis. Government multiplier is a number of multipliers that indicate how much output will go up or down if there is an increase or decrease in the government budget expenditure (Hartono 2006; Suparmoko 2013). For example, the



**Figure 2**  
**The Effect of Government Expenditure Change on GDP**

Source: Hartono (2006).

effect of the change up or down, the government expenditure is to the level of economic growth with GDP indicators which are shown in Figure 2.

Figure 2 shows an example of the multiplier effect of government by using graphs. If the government expenditure increases to Rp 430 trillion that is above the line  $C + I$ , the aggregate expenditure increases to Rp 1,013 trillion to line  $C + I + G$ . Point, the output of new balance is achieved when the line is exactly the same expenditure to gross domestic product that is Rp. 2,210 Trillion. Thus, the multiplier process, the increase in government expenditure will increase the national income equally. As a result of these circumstances, the multiplier value of the investment is equal to the change in the value of the multiplier of changes in government expenditure.

Based on the review of arguments and the previous literature, the researchers hypothesized that government expenditure contributed positively to the economic growth in Indonesia.

### 3. RESEARCH METHOD

#### Research Design

This study determines the effect of government expenditure on economic growth in this case that is the Gross Domestic Product (GDP). This study uses time series design. The secondary data were obtained from the data issued by the State Budget Ministry of Finance of the Republic of Indonesia, Central Bureau of Statistics, and the National Development Planning Agency. Data period is from 2004 through 2013.

#### Operational Definition and Measurement of Variables

This study analyzes the relationship of two variables, i.e. the dependent variable and the independent variables. The dependent variable is economic growth, while the value of government expenditure an independent variable.

The operational definition of government expenditure is the amount of government expenditure in providing goods and services that are needed in the economy as summarized in state spending. The value of expenditure or spending state as stated in the summary Budget during the study period. The size of this variable is expressed in units of dollars. Economic growth is operationally defined as the value of Gross Domestic Product (GDP). The size of this variable is also expressed in terms of dollars.

#### Data Analysis Techniques

Initially, the researchers show descriptively about macro assumptions used in the preparation of the national budget throughout the study period. Then, the researchers graphically displayed the amount of government expenditure on the development and economic growth in Indonesia which is indicated by the value of GDP based on the available data.

Furthermore, the researchers analyzed the effect of government expenditure on economic growth in Indonesia. As this study confirms the relationship between the independent variables to the dependent variable, the use of a single regression analysis is done (Gujarati & Potter 2010). Mod

**Table 3**  
**Macro Assumption of the Preparation of the National Budget in 2010 through 2013**

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Economic growth (% yoy)	4,8	5,7	5,5	6,3	6,0	4,6	6,2	6,5	6,5	6,8
Inflation (% yoy)	7,0	17,1	6,6	6,6	11,1	2,8	6,96	3,79	6,8	4,9
Rupiah Exchange rate (Rp/USD)	8.900	9.705	9.164	9.14	9.691	10.408	9.087	8.779	9.000	9.300
Interest rate SPN 3 months average (%) *)	7,5	9,1	11,7	8,0	9,3	7,6	6,6	4,8	5,0	5,0
Crude oil price Indonesia (USD/barrel)	36,0	51,8	63,8	72,3	97,0	61,6	79,4	111,5	105,0	100,0
Oil Lifting (thousand barrels/ day)	1,072	0,999	0,959	0,899	0,931	0,944	0,954	0,900	0,930	0,900
Gas Lifting (thousand barrels/ day equal to Oil)	-	-	-	-	-	-	-	-	-	1,360

\*) Before 2011 using interest rate SBI 3 months

Source: State Budget 2004-2013 (Processed data, 2014)

el estimation is as follows:

$$Y = \beta_0 + \beta_i X_i + u_i \quad (1)$$

Where Y is the dependent variable, namely economic growth as measured by GDP;  $X_i$  is the independent variable (regressor), i.e. government expenditure  $u_i$  is a confounding factor stochastic (error of the term), and the subscript i symbolizes the i.  $\beta_i$  observation.  $i\beta$  measures changes in the average value of Y for each change  $X_i$ , in the sense that these coefficients give the effect of "direct" or "net effect" (direct or net effect) of any changes  $X_i$  to the mean value of Y.

Before it is used, the research model should so classical assumption test. The results of scatterplots graphs, the Durbin-Watson test, and normal PP plot charts, identified that the model does not have symptoms heterocedastity, autocorrelation and normality. Multicollinearity test need not be performed for a single regression model.

In hypothesis testing, as the regression model is single, the researchers simply used t-test with testing the hypothesis at a significance level of 5%. The criterion is that when the value of the coefficient  $t$  is smaller than 0.05, it means that the hypothesis is proven. The result of hypothesis testing is combined with R test so they can show the relative degree of correlation between the variables analyzed. This process was assisted data processing with SPSS for Windows ver.20.

#### 4. DATA ANALYSIS AND DISCUSSION

##### Basic Assumption of Macroeconomic Budget Preparation

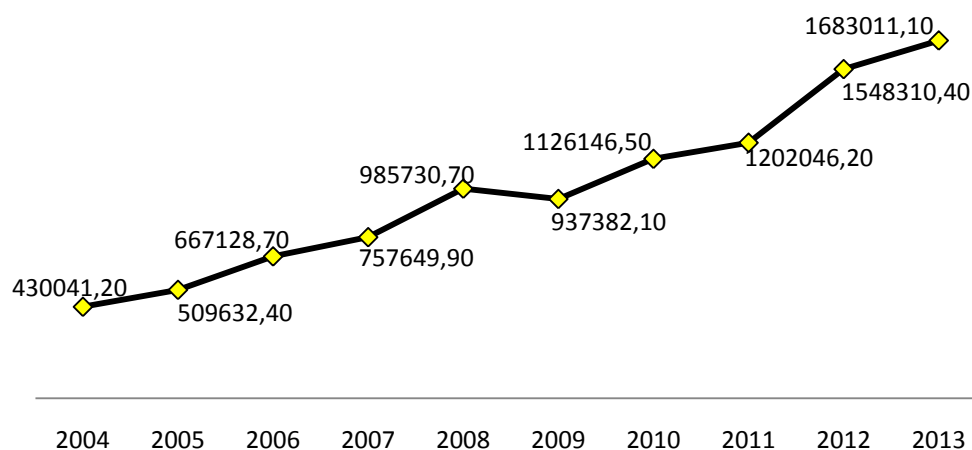
Basic macroeconomic assumption is used in the preparation of the state budget such as: (1) growth (% year on year/yoy); (2) inflation (% yoy); (3) the

rupiah (IDR / USD); (4) 3-month interest rate SPN average (%); (5) Indonesian Crude Price (USD / barrel); (6) the lifting (thousand barrels per day); and, (7) the lifting gas (thousand barrels per day of oil equivalent). Especially, for gas lifting assumption, the new one is inserted into the macro assumptions used in the preparation of the state budget in 2013. Table 3 shows the fluctuation of the macro assumptions in the preparation of the Indonesian state budget over the period 2004 to 2013. From Table 3, it can be seen that the hope of government revenue and expenditure management in each fiscal year is to create higher economic growth compared to the previous year, with a lower inflation rate, and the rate of absorption of higher loan capital through the stimulus rate lower interest.

##### Descriptive Analysis-Graphics Government Expenditure

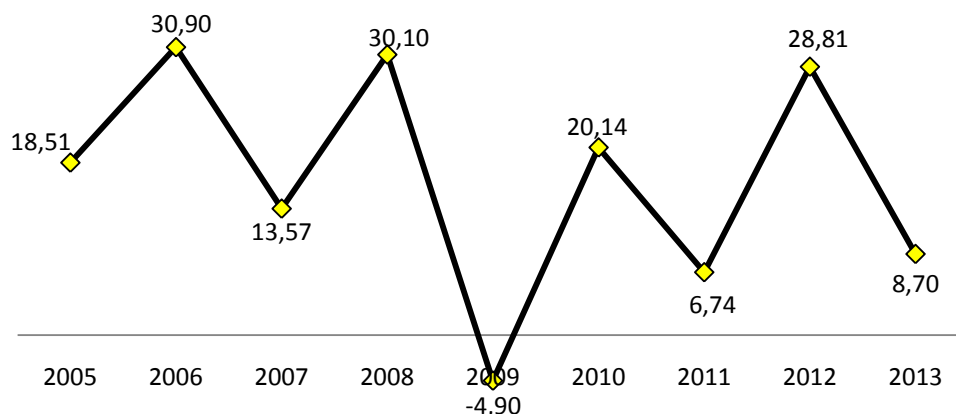
The economic objective to be achieved is an important factor in the determination of government expenditure. The government crucial role is vital in the economy. Government activities can manipulate or organize economic activities in the desired direction. Indonesian government expenditure allocation for several years is generally aimed at improving the infrastructure in order to overcome the problem of unemployment, and economic growth problems. It can be seen from the large allocation of funds for infrastructure improvements and other supporting facilities. The development of government expenditure from year to year can be seen from two sides, namely in terms of numbers, and of the growth, Table 1 shows the trend of government expenditure during 2004 through 2013 from the amount shown graphically in Figure 3.





**Figure 3**  
**Trend of Expenditure of the Government of the Year 2004 – 2013**

Source: Processed data, 2014.



**Figure 4**  
**Trend of Government Expenditure Growth 2004 – 2013**

It can be seen graphically the development trend of rising government expenditure, however the amount of year to year movement is going up and down. General government expenditure is allocated to two things, namely the central government spending and transfers to the regions. Meanwhile, the central government expenditure allocated by the government to three aspects, namely: (1) the development of infrastructure is driving economic growth; (2) create an atmosphere securely to the lives of the people and businesses; and, (3) subsidies.

Figure 4 shows the highest growth of government expenditure occurred in 2012, which in that year there was an increase high enough for government expenditure from the previous year of 6.74% to 28.81%, or 22.07% with a difference. However, when viewed from the achievement, the highest growth of government expenditure occurred in

2006 reaching to 30.90%.

Based on Figure 4, it can be seen that the growth of government expenditure in 2009 experienced a negative growth in the amount of 4.90%. Based on information obtained through the Ministry of Finance website ([www.kemenkeu.go.id](http://www.kemenkeu.go.id)), this occurred due to a decrease in revenues primarily from the tax sector and non-tax revenues (non-tax). They are from domestic revenue plan in the state budget in 2009 decreased by Rp. 109,312.9 billion or 11.2 percent lower. The decline occurred in tax revenue by 1.0 percent and non-tax revenues amounted to 32.0 percent. The fall in tax revenue forecast in 2009 to make the tax revenue growth was negative for the first time since the Asian economic crisis in 1997. This occurred due to the global economic crisis and the administration of the fiscal stimulus package in 2009.

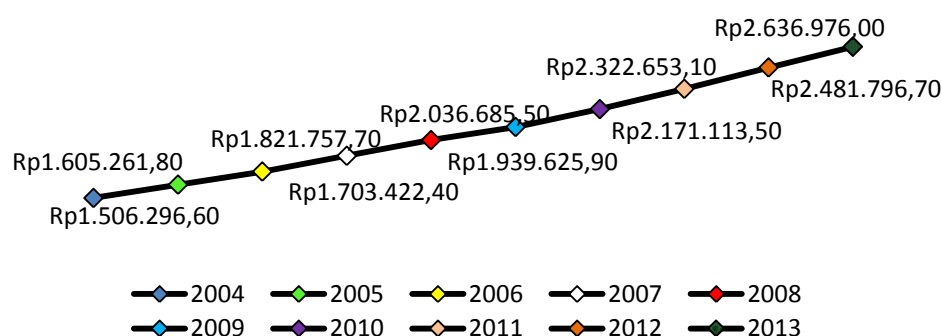


Figure 5  
Trend of GDP Value Year 2004 - 2013

Source: Processed data, 2014.

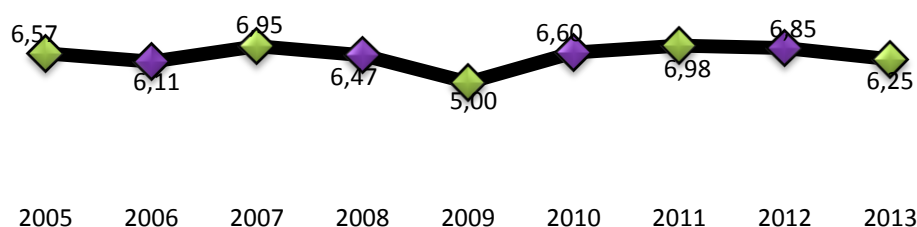


Figure 6  
Trend GDP Growth Year 2004 - 2013

Source: Processed data, 2014.

### Gross Domestic Product (GDP)

GDP growth in turn is expected to improve the welfare of the community. Various forms of policies and measures are chosen and pursued in order to achieve the goal of economic activity. Over the past ten years, the development of Indonesia's nominal GDP growth has been positive. Based on the data in Table 2, the trend of Indonesia's GDP during 2004 to 2013 from the amount are shown graphically in Figure 5.

Based on Figure 5, it shows graphically that the trend value of Indonesia's GDP continues to rise in a way that is almost straight. The increase in world GDP over the period of the study occurred in 2011 in the amount of 6.89% or nominally Rp. 151,539.6 billion. Overall, the increase in the value of Indonesia's GDP is by an average of 5.78% or nominally by Rp113.067,9 billion per year.

In terms of growth, Figure 6 shows the percentage of GDP recorded a fluctuating number, different from the value of the GDP in nominal amount. The lowest GDP growth was recorded in 2009 by 5%. This decrease indicates is indicated a result of the global economic growth in 2009 that was the peak of the global financial crisis marked by a glo-

omy economic activity, weakening capital market, tight liquidity, a decrease in the volume of trade, and economic slowdown in many countries. These conditions affect the development of the domestic economy as it relates to the global economy through trade and capital flows. The turmoil in the capital markets of developed countries has led to changes in the preferences of investors to transfer funds to the instruments of government investment in developed countries is considered relatively safe.

The pressure does not only cause the turmoil in various capital markets of developing countries, but also resulted in increasingly tight liquidity funds in various countries, including Indonesia. The slowing rate of the world economy in 2009 has led to the volume of world trade which has decreased at a rate that is quite sharp. After reaching an average expansion of 8.1 per cent over the last 5 years, in 2008, growth in world trade volume dropped to only 4.1 percent. Thus, the indication of the decline of the volume of world trade is partly reflected in a sharp decline in the Baltic Dry Index, which is a barometer of world trade volume. For example, in April of 2009, the IMF predicted the growth rate of trade volume dropped by minus

**Table 4**  
**Result of Regression Analysis**

Coefficients<sup>a</sup>

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1136047.764	48082.588		23.627	.000
	EXPD	.900	.045	.990	19.866	.000

a. Dependent Variable: GDP

Source: Processed data, 2014.

11.0 percent, a decline compared with the predictions made earlier.

However, in 2010, world trade was expected to begin to recover with growth reaching 0.6 percent. Indonesia cannot be separated from the global economic crisis. Based on the information from Ministry of Finance ([www.kemenkeu.go.id](http://www.kemenkeu.go.id)), the transmission of the global economic crisis to the economy of Indonesia was through two pathways, namely the financial channel and the trade channel. Through the financial channel, the impact of the crisis may occur directly or indirectly. Direct impacts occur when a bank or financial institution in Indonesia to buy troubled assets (toxic assets) of the issuing company experiencing liquidity problems abroad. In addition, the transmission of the crisis through direct financial channel can also occur through the withdrawal of funds by foreign investors who have liquidity problems (deleveraging).

Besides through both of the above, the direct impact of financial channel can also occur through the action of the transfer of the investment portfolio of high risk to low risk (flight to quality). Meanwhile, the indirect impact of financial channel could occur through the emergence of barriers to the availability of financing the economy. Meanwhile, the impact through the trade channel can emerge through weakening exports and imports, which in turn affect the real sector and raises the potential credit risk for banks. It also has the potential to put pressure on Indonesia's balance of payments (BOP).

### Hypothesis Testing

The proposed hypothesis stated that there was a positive and significant effect of government expenditure on economic growth of the country. The single regression analysis in Table 4 shows that the regression coefficients of the independent variables with a significance value of 0.900 t of 0.000 ( $p < 0.05$ ). This indicates that the hypothesis proposed in this study can be proved.

Based on Table 5, the relationship between these two variables is reinforced by a correlation

coefficient (R) of 0.991 which implies a relatively very strong linkage of the role of Government Spending on Economic growth as measured by GDP. The coefficient of determination (R-square) of 0.981 indicates that the role of government expenditure variable in explaining the fluctuations of economic growth is also relatively very large, namely 98.1%, while the other variables are thought to affect economic growth harbor only contribute 1.9%.

The results of the analysis expands the empirical evidence submitted by Gregorious and Ghosh (2007), Loizides and Vamvoukas (2005), Alexiou (2009), as well as Alshahrani and Alsadiq (2014), which supports the Keynesian view that states the importance of the role government for development. In this case, the government through fiscal policy in the form of shopping or spending does a stimulus to encourage growth of the national economy (Ogundipe & Oluwatobi 2013; Folster & Hennekson 2001). This result also supports the idea that the Harrod-Domar government's role in creating economic growth is not only a short term, but also it has a long-term perspective (Wahyu et al. 2014; Hussein and Thirlwall 2000).

Government expenditure reflects government policy, where the proportion expenditure **the government against the national income** can be the size of the role of government in an economy (Sitaniapessy 2013; Samudram et al. 2009). If the government has set a policy to purchase goods and services, government expenditures reflect the costs to be incurred by the government to implement the policy. The government spending in real terms can be used as an indicator of the magnitude of government activities funded by the government expenditure.

The larger and more government activities, the greater the government expenditure is concerned (Maipita 2012; Alshahrani & Alsadiq 2014). However, expenditure management also needs to be offset by revenue management (Tcherneva 2008; Manik & Hidayat 2010). The government, therefore, is expected to optimize the revenues from the tax sector, and explore potential revenue from other

sectors; because of the non-tax state revenue is seen relatively smaller than the state income tax sector. This condition is seen from a review of the data state budget during the period 2004 to 2013.

The concern arises because the descriptive analysis showed that graphically (Figure 3), the value of government spending over the period of the study continued to rise. But based on the trend (Figure 4), the growth of government expenditure in 2013 decreased by 9.81% compared to that achieved in 2005. Based on the information from the Ministry of Finance website ([www.kemenkeu.go.id](http://www.kemenkeu.go.id)), the trend indicated a decrease in spending is not because the government is able to perform the efficiency of spending, but more due to a decrease in revenue primarily from the tax sector and non-tax revenues (non-tax) which makes the tightening of state spending. The decline in revenues is indicated because of the inability of large-scale industrial sectors meet their tax obligations due to the economic crisis, where it is known that the industrial sector is highly vulnerable to global economic turmoil.

The condition that occurs in government expenditure has also descriptively unidirectional impact on GDP of Indonesia, as evidenced also by the results of the regression analysis. Graphically (Figure 5), the value of Indonesia's GDP over the period of the study continued to rise following the increase in the value of government spending. And based on trend analysis (Figure 6), Indonesia's GDP growth declined in 2013 amounted to 0.32% compared to that achieved in 2005; resembles the growth trend in government spending declined. Thus, it can be identified that the relative situation of the national economy too dependent on large-scale industrial sector led to vulnerability at the level of state revenue, which limit government spending policies, and ultimately weaken the ability of the creation of national GDP, as expected.

Therefore, the government is also expected to further provide reinforcement or priority to small and medium-sized economies, that the Indonesian economy can survive the circumstances that occur outside, especially from the impact of the crisis in other countries. This is because the sector is the foundation that supports Indonesia's economy amid the global economic shock and is a sector that is relatively less affected by the situation in other countries (Kristiyanti 2012; Tambunan 2005). This is reflected in the state of the economy in 2009, with the largest contributor in creating economic growth when it is household consumption sector and small and medium industries.

## 5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

The results of this study provide evidence that during 2004 through 2013, government expenditure has a positive and significant effect on economic growth as measured by GDP. Statistical analysis also shows that there is a very strong correlation between government spending and economic growth.

It implies that the role of government expenditure is very important, either in the form of routine expenditures, public expenditure or other forms of investment, as fiscal policies to encourage the growth of the national economy. However, scrutiny should be taken to avoid misallocation so that the benefits gained as expected or to prevent the distribution of the unequal allocation of expenditure so that there is equity on development sectors that support economic growth.

The weakness is that this study did not specify the nature of the relationship between each of the components of aggregate government expenditure and economic growth. Future research can be designed to make efforts so that could be explored more in-depth how the contribution of each component of government expenditure is. For that reason, it can provide a comprehensive understanding of the role of government expenditure both in the aggregate and partially to the national economic growth.

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